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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,803	08/28/2003	Kazuhiro Shimura	OGW-0284	6002
23353	7590	11/19/2004	EXAMINER	
RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			ALLEN, ANDRE J	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/649,803

Applicant(s)

SHIMURA, KAZUHIRO

Examiner

Andre J. Allen

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-4 and 6-9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barabino in view of Piesinger.

Regarding claims 1,3,6 and 8 Barabino discloses a sensor 10 (abstract) which detects a physical quantity relating to tire air pressure (abstract) and a transmitter which sends signals detected by the sensor (col. 3 lines 14-16), wherein the sensor is a sound pressure level sensor which detects a sound pressure level inside a tire cavity filled with air (col. 2 lines 12-18 col. 4 lines 1-5) and a processing unit that determines whether values are changing around a

preset threshold (col. 3 lines 1-5). Barabino does not teach the transmitter being enabled to send the signals only when the sound pressure level detected by the sound pressure level sensor is changed. Piesinger teaches a transmitter 13 being enabled to send the signals only when the sound pressure level detected by the sound pressure level sensor is changed (col. 1 lines 37-41 col. 3 Lines 23-26,51-60).

It would have been obvious to a person having ordinary skill in the art of transmitters to modify the sound device taught by Barabino with a transmitter that transmits only when a pressure changes as taught by Piesinger for the purpose of preserving battery life (Piesinger col. 1 lines 37-41).

Regarding claims 2 and 7 Barabino teaches the sound pressure level detected by the sound pressure level sensor is a frequency around a resonance inside the tire cavity (abstract)(col. 2 lines 1-10).

Regarding claims 4 and 9 Barabino teaches a power source (col. 6 lines 38-43) but does not disclose a battery. Piesinger reads on a battery 15. It would have been obvious to a person having ordinary skill in the art of monitoring tire characteristics at the time the invention was made to modify the power source taught by Barabino with a battery as taught by Piesinger for the purpose of providing power and biasing the operation of an electronic device.

2. Claims 5 and 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barabino in view of Piesinger as applied to claims 1-4 and 6-9 above, and further in view of Hardman et al.

Regarding claims 5 and 10 Barabino and Piesinger teaches monitoring pressure in a tire. Barabino as modified by Piesinger does not teach monitoring temperature. Hardman teaches a transmitting device that monitors temperature and conserves battery life (col. 2 lines 45-51). It would have been obvious to a person having ordinary skill in the art of tire monitoring devices at the time the invention was made to modify Barabino in view of Piesinger with the function of monitoring temperature as taught by Hardman for the purpose of accurately determining the physical status of a pneumatic tire.

### ***Conclusion***

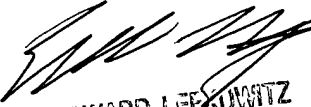
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre J. Allen whose telephone number is 571-272-2174. The examiner can normally be reached on mon-fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andre Allen  
Patent Examiner  
Art Unit 2855



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